

REMARKS

I. Status of the Claims

Claims 1-88 were originally filed. As the result of a restriction requirement, claims 20-69 and 76-82 have been withdrawn from consideration and are now canceled. Claims 1-19, 70-75, and 83-88 were pending under examination.

Upon entry of the present amendment, claims 6, 71, and 84 are canceled; claims 1, 70, and 83 are amended to recite "at least one amino acid corresponding to position 183 of SEQ ID NO:4 or position 208 of SEQ ID NO:2 in the MTB32A antigen (SEQ ID NO:2 or 4) has been substituted by a different amino acid." This limitation is imported from claims 71 and 84, now canceled. No new matter is added by this amendment.

II. Objection to the Specification

The specification is objected to for containing an embedded hyperlink and/or other form of browser-executable code. This objection is moot as the specification has been amended to delete any such browser-executable code.

III. Claim Rejections

A. Double Patenting

Claims 1-5 and 19 were rejected under the judicially created doctrine of obviousness-type of double patenting over claim 1 of U.S. Patent No. 6,627,198. Applicants respectfully traverse the rejection in light of the present amendment. Claim 1 of U.S. Patent No. 6,627,198 ("the '198 patent") is drawn to a purified polypeptide comprising the amino acid sequence of SEQ ID NO:26, which is identical to SEQ ID NO:20 of the present application. As amended, claim 1 recites "at least one amino acid corresponding to position 183 of SEQ ID NO:4 or position 208 of SEQ ID NO:2 in the MTB32A antigen (SEQ ID NO:2 or 4) has been substituted by a different amino acid." This is a limitation that claim 1 of the '198 patent does not have. Nor does the '198 patent suggest this limitation. Thus, the amended claim 1 and its dependent claims of the present application are not obvious over claim 1 of the '198 patent.

Claims 1-5 and 19 were provisionally rejected under the judicially created doctrine of obviousness-type of double patenting over claim 1 of the co-pending patent application No. 10/359,460 ("the '460 application"). Claim 1 of the '460 application is drawn to, among other things, a polypeptide comprising the amino acid sequence of SEQ ID NO:24 (*i.e.*, MTB59F, identical to SEQ ID NO:20 of the instant application), which may contain one or more conservative amino acid substitution. Since the amended claim 1 of this application now recites "at least one amino acid corresponding to position 183 of SEQ ID NO:4 or position 208 of SEQ ID NO:2 in the MTB32A antigen (SEQ ID NO:2 or 4) has been substituted by a different amino acid," and claim 1 of the '460 application does not relate to any such feature either explicitly or implicitly, claim 1 and its dependent claims of this application thus are not obvious over claim 1 of the '460 application.

Claims 1-4, 6, 8, 17, and 19 were also provisionally rejected under the judicially created doctrine of obviousness-type of double patenting over claims 62-64 of the co-pending patent application No. 09/597,796 ("the '796 application"), which are drawn to a composition comprising the fusion polypeptide MTB72F, or a fusion polypeptide encoded by a polynucleotide sequence capable of hybridizing to the complement of the coding sequence for MTB72F. Because of the newly added limitation "at least one amino acid corresponding to position 183 of SEQ ID NO:4 or position 208 of SEQ ID NO:2 in the MTB32A antigen (SEQ ID NO:2 or 4) has been substituted by a different amino acid" in claim 1, and the cancellation of claim 6 in the present application, claim 1 and its dependent claims of this application are not obvious in view of claims 62-64 of the '796 application.

In summary, the amendment to the pending claims in this application ensures that the claims are not obvious over the claims in the issued or co-pending applications. As such, the withdrawal of the double patenting rejections is respectfully requested.

B. 35 U.S.C. §112, Second Paragraph

Claims 70-75 and 83-87 were rejected under 35 U.S.C. §112, second paragraph, for alleged indefiniteness. Specifically, the Examiner alleged that the meaning of the term "the active site triad" is unclear. As amended, claims 70 and 83 now recite "at least one amino acid

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corresponding to position 183 of SEQ ID NO:4 or position 208 of SEQ ID NO:2 in the MTB32A antigen (SEQ ID NO:2 or 4) has been substituted by a different amino acid" in place of the recitation using the term "active triad site." This rejection is thus obviated.

Claims 7 and 88 were also rejected under 35 U.S.C. §112, second paragraph, for alleged indefiniteness. Specifically, the Examiner alleged that the two claims appear identical. Applicants respectfully traverse the rejection. Claim 7 is drawn to a composition that comprises a fusion polypeptide having the amino acid sequence of SEQ ID NO:18. In contrast, claim 88 is drawn to a fusion polypeptide comprising the amino acid sequence of SEQ ID NO:18. Thus, these two claims are directed to two different subject matter and are therefore not identical in scope.

Claims 9-16 and 18 were further rejected under 35 U.S.C. §112, second paragraph, for alleged indefiniteness, as they depend from rejected claims. Applicants submit that since all claim rejections have been overcome, this rejection is moot.

The withdrawal of rejections under 35 U.S.C. §112, second paragraph, is respectfully requested.

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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,


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